● PRINTER RUSH ● (PTO ASSISTANCE)

| Application: 09/042397 Examiner: Vacturian, H GAU: 2634 | | | | | | |
|------------------------------------------------------------------------------|-------------------------------------------------------|---------------------|--------------------------------------------------------|---------------|---------|--|
| From: | fyc | Location: | TOO FMF FDC | Date: | 4/27/05 | |
| | ₀ 994 ⁴² | Tracking #: <u></u> | 06086264 | Week Date: | 3/14/65 | |
| , | DOC CODE 1449 IDS IIFW SRFW DRW OATH 312 SPEC | 6/29/200 | MISCELL Continuing Foreign Price Document I Fees Other | Data ority | | |
| [RUSH] MESSAGE: Original claim 3 does not end with a period. Please hespive. | | | | | | |
| | | | | Thanh So | fou | |
| [XRUSH] RESPONSE: | | | | | | |
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| | | | | FAITON | 14162 | |

NOTE: This form will be included as part of the official USPTO record, with the Response document coded as XRUSH.

REV 10/04

| 2 | for generating a frequency and phase corrected output signal in response to said digital receiver |
|-------------------|---------------------------------------------------------------------------------------------------|
| 3/18 | receiving said updated estimated frequency error estimate and said updated estimated phase error |
| 2/1/0 | estimate. |
| 1 | |
| 1 | 4. The frequency and phase synchronizer system of claim 1 wherein said unknown frequency |
| 2 | offset value is determined by: |
| 3 | |
| 4 | generating a first product by multiplying said first sequence of even numbered samples by a first |
| 5 | parameter; |
| 6 | \cdot |
| 7 2 | generating a first complex exponential value by applying a first discrete time voltage controlled |
| 758 84 100 | oscillator to said frequency error estimate; |
| 9 <u>.</u> | |
| 100 | generating a second product by multiplying said first product and said first complex exponential |
| 11 11 | value; |
| 120 | |
| 12g 13g 14g | generating a third product by multiplying said second sequence of odd numbered samples by a |
| 14] | second parameter; |
| 15 | |
| 16 | generating a second complex exponential value by applying a second discrete time voltage |
| 17 | controlled oscillator to said frequency error estimate; |
| 18 | |
| 19 | generating a fourth product by multiplying said third product and said second complex |
| 20 | exponential value; |
| 21 | |
| 22 | generating a sequence of first sum signals SUM11 by adding said second and fourth products, |
| 23 | where l is an index and $1 \le l \le N$ and N is a positive integer; |